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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,583	12/05/2001	Ralf Bertram	DE920010035US1	3541

7590 08/11/2004

David R. Irvin  
IBM Corporation  
T81/503  
PO Box 12195  
Research Triangle Park, NC 27709

EXAMINER
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SHERR, CRISTINA O

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/007,583

Applicant(s)

BERTRAM ET AL.

Examiner

Cristina O Sherr

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This communication is in response to the Applicant's amendment filed 29 March 2004. Claims 1, 2, and 5 have been amended. Claims 8-14 are newly added. Claims 1-14 are pending in this case.

***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-6 are rejected under 35 U.S.C. 102(a) as being anticipated by Shear (US 5,410,598).

6. Regarding claim 1 –

Shear discloses a computerized method for generating a recommendation of an item to an advisee, comprising the steps of: receiving a recommendation request comprising a selected item list from an advisee for a recommendation by a recommendation system;

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in response to the recommendation request, computing a plurality of similarity factors based on items from the selected item list that indicate similarity between the advisee and a plurality of users of the recommendation system who have previously provided ratings of items from the selected item list selecting, from the plurality of users of the recommendation system, neighboring users to the advisee, according to the similarity factors; generating a recommendation of at least one item of the selected item list items, according to the previously provided ratings of the at least one item plurality of items by the neighboring users (e.g. col 3 ln 60 – col 4 ln 15).

7. Regarding claim 2 –

Shear discloses the method of claim 1, wherein all items upon which the step of computing depends are included in the selected item list (e.g. col 4 ln 20-35).

8. Regarding claim 3 –

Shear discloses the method of claim 2, wherein the recommendation of at least one item includes only items that are included in the selected item list (e.g. col 4 ln 30-35).

9. Regarding claim 4 –

Shear discloses the method of claim 1, wherein the step of selecting neighboring users excludes, any user whose similarity with the advisee is below a predetermined threshold (e.g. col 4 ln 35-50).

10. Regarding claim 5 –

Shear discloses the method of claim 1, wherein the step of computing and the step of selecting are executed substantially in parallel by inserting each newly computed similarity factor into a neighbor list in decreasing order of similarity and by limiting length

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of the neighbor list by excluding a user with lowest similarity if otherwise the neighbor list would exceed a predetermined length (e.g. col 4 ln 45-60).

11. Regarding claim 6 –

Shear discloses the method of claim 1, further including the step of caching identifiers of the neighboring users, associated similarity factors, and time stamps (e.g. col 5 ln 25-45).

12. Claim 7 is rejected under 35 U.S.C. 102(a) as being anticipated by Shear (US 5,410,598).

13. Shear discloses a user profile for a recommendation system, comprising a plurality of records, each record including a user identifier, an item identifier, and a rating value, wherein each record is linked in a first and a second dimension, the first dimension linking records with a same user identifier in a sequence according to the item identifier, and the second dimension linking records with a same item identifier in a sequence according to the user identifier (e.g. col 3 ln 60 – col 4 ln 15).

14. Claims 8-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Shear (US 5,410,598).

15. Regarding claim 8 –

Shear discloses a computerized method for generating a recommendation of an item to an advisee, comprising the steps of receiving a selected item list from an advisee; selecting a first set of users from a group of users based on the selected item list; selecting neighboring users from the first set of users based on similarities between the advisee and each member of the first set of users; generating a recommendation of at

least one item from the selected item list based on ratings provided by each neighboring user (e.g. col 3 ln 60 – col 4 ln 15).

16. Regarding claim 9 –

Shear discloses the computerized method of claim 8, wherein the similarities are determined from an advisee profile and user profiles, and the advisee and user profiles are based on advise and user behavior including at least one of buying pattern, item ratings, bookmarked websites, website usage pattern, and user action relative to a particular item (e.g. col 4 ln 20-35).

17. Regarding claim 10 –

Shear discloses the computerized method of claim 9, wherein an advisee profile or a user profile is updated when a new piece of information is added thereto (e.g. col 4 ln 30-35).

18. Regarding claim 11 –

Shear discloses the computerized method of claim 8, further comprising assigning a confidence factor to each advisee profile and each user profile, wherein the confidence factor is based on the combined effect of selected pieces of information recorded in a user or advisee profile (e.g. col 4 ln 35-50).

19. Regarding claim 12 –

Shear discloses the computerized method of claim 8, further including determining similarities between the advisee and each member of the first set of users after receiving a selected item list from the advisee (e.g. col 4 ln 35-50).

20. Regarding claim 13 –

Shear discloses the computerized method of claim 8, wherein a member of the first set of users is selected as a neighboring user if the similarity between the advisee and the member of the first set of users is better than a predetermined threshold (e.g. col 4 ln 45-60).

21. Regarding claim 14 –

Shear discloses the computerized method of claim 8, further comprising assigning a weight to each neighboring user where the weight is greater for a neighboring user have greater similarity to the advisee and the weight is lower for a neighboring user having a lower similarity to the advisee (e.g. col 5 ln 25-45).

22. Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the examiner.

### ***Conclusion***

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

24. Schuetze et al (US 6,564,202B1) discloses a system and method for visually representing the contents of a multiple object data cluster.

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25. Schuetze et al (US 6,567,797B1) discloses a system and method for providing recommendations based on multimodal user clusters.

26. Pyo (US 6,636,836B1) discloses a computer readable medium for recommending items with multiple analyzing components.

27. Schuetze et al (US 6,598,054B2) discloses a system and method for clustering data objects in a collection.

28. Bieganski et al (US 6,412,012B1) discloses a system, method and article of manufacture for making compatibility-aware recommendations to a user.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cristina O Sherr whose telephone number is 703-305-0625. The examiner can normally be reached on Monday through Friday 8:30 to 5:00.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 703-305-9768. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

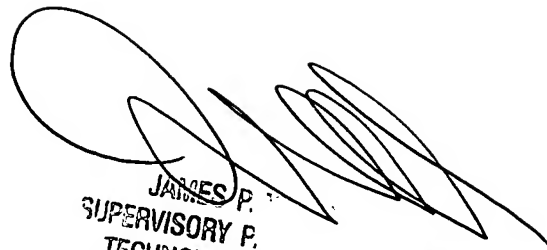
31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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